# **Fall Protection**

### OSHA Standard 1910.500

All employees who may be exposed to fall hazards are required to receive training on how to recognize such hazards, and how to minimize their exposure to them. Employees shall receive training as soon after employment as possible, and before they are required to work in areas where fall hazards exist. A record of employees who have received training and training dates shall be maintained.

# Training of employees shall include:

- Nature of the fall hazards employees may be exposed to.
- Correct procedures for erecting, maintaining, disassembling, and inspecting fall protection systems.
- Use and operation of controlled access zones, guardrails, personal fall arrest systems, safety nets, warning lines, and safety monitoring systems.
- Role of each employee in the Safety Monitoring System (if one is used).
- Limitations of the use of mechanical equipment during roofing work on low-slope roofs (if applicable).
- Correct procedures for equipment and materials handling, and storage and erection of overhead protection.
- Role of each employee in alternative Fall Protection Plans (if used).
- Requirements of the OSHA Fall Protection Standard, 29 CFR 1926, Subpart M.
- Requirements for reporting incidents that caused injury to an employee.

Additional training shall be provided on an annual basis, or as needed when changes are made to this Fall Protection Program, an alternative Fall Protection Plan, or the OSHA Fall Protection Standard.

# OSHA Regulations (Standards - 29 CFR)

# Duty to have fall protection. - 1926.501

• Part Number:

1926

• Part Title:

Safety and Health Regulations for Construction

Subpart:

М

Subpart Title:

Fall Protection 1926.501

Standard Number:Title:

Duty to have fall protection.

1926.501(a)

"General."

1926.501(a)(1)

This section sets forth requirements for employers to provide fall protection systems. All fall protection required by this section shall conform to the criteria set forth in 1926.502 of this subpart.

#### 1926.501(a)(2)

The employer shall determine if the walking/working surfaces on which its employees are to work have the strength and structural integrity to support employees safely. Employees shall be allowed to work on those surfaces only when the surfaces have the requisite strength and structural integrity.

# 1926.501(b)

#### 1926.501(b)(1)

"Unprotected sides and edges." Each employee on a walking/working surface (horizontal and vertical surface) with an unprotected side or edge which is 6 feet (1.8 m) or more above a lower level shall be protected from falling by the use of guardrail systems, safety net systems, or personal fall arrest systems.

# ..1926.501(b)(2)

#### 1926.501(b)(2)

"Leading edges."

1926.501(b)(2)(i)

Each employee who is constructing a leading edge 6 feet (1.8 m) or more above lower levels shall be protected from falling by guardrail systems, safety net systems, or personal fall arrest systems. Exception: When the employer can demonstrate that it is infeasible or creates a

greater hazard to use these systems, the employer shall develop and implement a fall protection plan which meets the requirements of paragraph (k) of 1926.502.

Note: There is a presumption that it is feasible and will not create a greater hazard to implement at least one of the above-listed fall protection systems. Accordingly, the employer has the burden of establishing that it is appropriate to implement a fall protection plan which complies with 1926.502(k) for a particular workplace situation, in lieu of implementing any of those systems.

### 1926.501(b)(2)(ii)

Each employee on a walking/working surface 6 feet (1.8 m) or more above a lower level where leading edges are under construction, but who is not engaged in the leading edge work, shall be protected from falling by a guardrail system, safety net system, or personal fall arrest system. If a guardrail system is chosen to provide the fall protection, and a controlled access zone has already been established for leading edge work, the control line may be used in lieu of a guardrail along the edge that parallels the leading edge.

1926.501(b)(3)

"Hoist areas." Each employee in a hoist area shall be protected from falling 6 feet (1.8 m) or more to lower levels by guardrail systems or personal fall arrest systems. If guardrail systems, [or chain, gate, or guardrail] or portions thereof, are removed to facilitate the hoisting operation (e.g., during landing of materials), and an employee must lean through the access opening or out over the edge of the access opening (to receive or guide equipment and materials, for example), that employee shall be protected from fall hazards by a personal fall arrest system.

# ..1926.501(b)(4)

#### 1926.501(b)(4)

"Holes."

#### 1926.501(b)(4)(i)

Each employee on walking/working surfaces shall be protected from falling through holes (including skylights) more than 6 feet (1.8 m) above lower levels, by personal fall arrest systems, covers, or guardrail systems erected around such holes.

### 1926.501(b)(4)(ii)

Each employee on a walking/working surface shall be protected from tripping in or stepping into or through holes (including skylights) by covers.

#### 1926.501(b)(4)(iii)

Each employee on a walking/working surface shall be protected from objects falling through

holes (including skylights) by covers.

#### 1926.501(b)(5)

"Formwork and reinforcing steel." Each employee on the face of formwork or reinforcing steel shall be protected from falling 6 feet (1.8 m) or more to lower levels by personal fall arrest systems, safety net systems, or positioning device systems.

1926.501(b)(6)

"Ramps, runways, and other walkways." Each employee on ramps, runways, and other walkways shall be protected from falling 6 feet (1.8 m) or more to lower levels by guardrail systems.

### 1926.501(b)(7)

"Excavations."

#### 1926.501(b)(7)(i)

Each employee at the edge of an excavation 6 feet (1.8 m) or more in depth shall be protected from falling by guardrail systems, fences, or barricades when the excavations are not readily seen because of plant growth or other visual barrier;

# ..1926.501(b)(7)(ii)

# 1926.501(b)(7)(ii)

Each employee at the edge of a well, pit, shaft, and similar excavation 6 feet (1.8 m) or more in depth shall be protected from falling by guardrail systems, fences, barricades, or covers.

1926.501(b)(8)

"Dangerous equipment."

1926.501(b)(8)(i)

Each employee less than 6 feet (1.8 m) above dangerous equipment shall be protected from falling into or onto the dangerous equipment by guardrail systems or by equipment guards.

1926.501(b)(8)(ii)

Each employee 6 feet (1.8 m) or more above dangerous equipment shall be protected from fall hazards by guardrail systems, personal fall arrest systems, or safety net systems.

#### 1926.501(b)(9)

"Overhand bricklaying and related work."

1926.501(b)(9)(i)

Except as otherwise provided in paragraph (b) of this section, each employee performing overhand bricklaying and related work 6 feet (1.8 m) or more above lower levels, shall be protected from falling by guardrail systems, safety net systems, personal fall arrest systems, or shall work in a controlled access zone.

1926.501(b)(9)(ii)

Each employee reaching more than 10 inches (25 cm) below the level of the walking/working surface on which they are working, shall be protected from falling by a guardrail system, safety net system, or personal fall arrest system.

Note: Bricklaying operations performed on scaffolds are regulated by subpart L - Scaffolds of this part.

..1926.501(b)(10)

### 1926.501(b)(10)

"Roofing work on Low-slope roofs." Except as otherwise provided in paragraph (b) of this section, each employee engaged in roofing activities on low-slope roofs, with unprotected sides and edges 6 feet (1.8 m) or more above lower levels shall be protected from falling by guardrail systems, safety net systems, personal fall arrest systems, or a combination of warning line system and guardrail system, warning line system and safety net system, or warning line system and personal fall arrest system, or warning line system and safety monitoring system. Or, on roofs 50-feet (15.25 m) or less in width (see Appendix A to subpart M of this part), the use of a safety monitoring system alone [i.e. without the warning line system] is permitted.

# 1926.501(b)(11)

"Steep roofs." Each employee on a steep roof with unprotected sides and edges 6 feet (1.8 m) or more above lower levels shall be protected from falling by guardrail systems with toeboards, safety net systems, or personal fall arrest systems.

### 1926.501(b)(12)

"Precast concrete erection." Each employee engaged in the erection of precast concrete members (including, but not limited to the erection of wall panels, columns, beams, and floor and roof "tees") and related operations such as grouting of precast concrete members, who is 6 feet (1.8 m) or more above lower levels shall be protected from falling by guardrail systems, safety net systems, or personal fall arrest systems, unless another provision in paragraph (b) of this section provides for an alternative fall protection measure. Exception: When the employer can demonstrate that it is infeasible or creates a greater hazard to use these systems, the employer shall develop and implement a fall protection plan which meets the

requirements of paragraph (k) of 1926.502.

Note: There is a presumption that it is feasible and will not create a greater hazard to implement at least one of the above-listed fall protection systems. Accordingly, the employer has the burden of establishing that it is appropriate to implement a fall protection plan which complies with 1926.502(k) for a particular workplace situation, in lieu of implementing any of those systems.

# ..1926.501(b)(13)

### 1926.501(b)(13)

"Residential construction." Each employee engaged in residential construction activities 6 feet (1.8 m) or more above lower levels shall be protected by guardrail systems, safety net system, or personal fall arrest system unless another provision in paragraph (b) of this section provides for an alternative fall protection measure. Exception: When the employer can demonstrate that it is infeasible or creates a greater hazard to use these systems, the employer shall develop and implement a fall protection plan which meets the requirements of paragraph (k) of 1926.502.

Note: There is a presumption that it is feasible and will not create a greater hazard to implement at least one of the above-listed fall protection systems. Accordingly, the employer has the burden of establishing that it is appropriate to implement a fall protection plan which complies with 1926.502(k) for a particular workplace situation, in lieu of implementing any of those systems.

### 1926.501(b)(14)

"Wall openings." Each employee working on, at, above, or near wall openings (including those with chutes attached) where the outside bottom edge of the wall opening is 6 feet (1.8 m) or more above lower levels and the inside bottom edge of the wall opening is less than 39 inches (1.0 m) above the walking/working surface, shall be protected from falling by the use of a guardrail system, a safety net system, or a personal fall arrest system.

### 1926.501(b)(15)

"Walking/working surfaces not otherwise addressed." Except as provided in 1926.500(a)(2) or in 1926.501 (b)(1) through (b)(14), each employee on a walking/working surface 6 feet (1.8 m) or more above lower levels shall be protected from falling by a guardrail system, safety net system, or personal fall arrest system.

1926.501(c)

"Protection from falling objects." When an employee is exposed to falling objects, the employer shall have each employee wear a hard hat and shall implement one of the following measures:

1926.501(c)(1)

Erect toeboards, screens, or guardrail systems to prevent objects from falling from higher evels; or,

..1926.501(c)(2)

1926.501(c)(2)

Erect a canopy structure and keep potential fall objects far enough from the edge of the higher level so that those objects would not go over the edge if they were accidentally displaced; or,

1926.501(c)(3)

Barricade the area to which objects could fall, prohibit employees from entering the barricaded area, and keep objects that may fall far enough away from the edge of a higher level so that those objects would not go over the edge if they were accidentally displaced

# **Fall Protection**

# Safety Training Handout

# ■ Why is training necessary for fall protection?

Slips and falls are a leading cause of serious injuries in the workplace.

# ■ Why are injuries from falls so serious?

- Impacts from falls break bones.
- If you fall far enough, the fall will kill you.
- You can be impaled by objects when falling.

# How do you avoid serious injury while working up so high?

- Stay away from edges.
- Identify potential fall hazards.
- · Keep tools away from edges.
- Learn how to get to your work area safely.
- Learn where barriers, bridges, ramps and cages are.
- Wear personal fall arrest equipment.
- Make sure your personal fall arrest equipment works.

# ■ You need to use fall arrest equipment when you:

- Are six feet or more above the ground.
- Need your hands free to work.
- Are working near an open edge.
- Have to be suspended above the ground.

# ■ What is a personal arrest system?

A harness connected to a lanyard, which is then connected to one or two points set up as anchors.

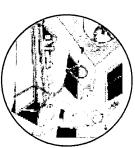
# ■ How often does my equipment have to work?

Every time. Most workplace injuries from falls come from thinking you can "get by without it this time."

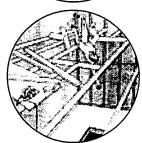


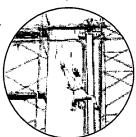
# Fall Protection Tips

- Identify all potential tripping and fall hazards before work starts.
- Look for fall hazards such as unprotected floor openings/edges, shafts, skylights, stairwells, and roof openings/edges.
- Inspect fall protection equipment for defects before use.
- Select, wear, and use fall protection equipment appropriate for the task.
- Secure and stabilize all ladders before climbing them.
- Never stand on the top rung/step of a ladder.
- Use handrails when you go up or down stairs.
- Practice good housekeeping. Keep cords, welding leads and air hoses out of walkways or adjacent work areas.









For more complete information:



Occupational Safety and Health Administration

U.S. Department of Labor www.osha.gov (800) 321-OSHA